Hole, Mass., 19 (1935). Phormidium Retzii of Croasdale, ibid. 20 (1935), not Gom. Authentic material: Rabenh. Alg. 244 (F), 929 (T). -Frequently seen on moist soil in depressions and in greenhouses, sometimes among other submersed algae in ponds. Plant-masses having the described characters of f. genuina Gom. apud Frémy and f. inundata Gom. apud Frémy, Mém. Soc. nat. Sci. nat. & math. Cherbourg 41:83 (1934), are collected in the Woods Hole region; but material of both forms appears to develop fascicles in exactly the same manner when transferred to the laboratory and grown under subaerial conditions. Specimens seen: MASHPEE: in John Pond, C. M. Palmer, Sept. 1937 (D). FALMOUTH: on soil in greenhouse near railroad station, Falmouth, Drouet 1933, 29 Aug. 1936 (D, F); on soil in a pasture, Sippewisset, Drouet 1935, 4 Sept. 1936 (D, F, S, T, Y); on soil in a depression east of Iron Pond, Woods Hole, Drouet 1938, 12 Sept. 1936 (D, T); in spring north of Nobska Point, C. M. Palmer, Sept. 1937 (D). Gosnold: freshwater pond, Pasque Island, H. Croasdale, 26 June 1934 (D); Pink Pond, Nonamesset Island, H. Croasdale, 2 July 1934 (D).

(To be continued)

## WESTERN EXTENSION OF THE RANGE OF PINUS BANKSIANA IN NEW YORK

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For the past thirty years or more the known distribution of *Pinus Banksiana* in New York has been confined to certain portions of the Lake Champlain watershed in Clinton and Essex counties. No stations have been reported, during this time, which would materially extend the range as outlined by the early observations of Sears¹ and Peck.² House³ lists *Pinus Banksiana* as "rare" in northern New York, citing the stations reported by Peck in the Ausable and Bouquet valleys. The junior writer⁴ described the association of this species with *Pinus rigida* Mill. at Clintonville, Essex County, and has noted its occurrence in a number of other unreported localities, all however, within the general limits of the range as indicated above.

In the summer of 1931, the senior writer discovered a group of *Pinus Banksiana* growing on a sandy knoll along the east bank of the Deer River in the Town of Brasher in eastern St. Lawrence County,

<sup>&</sup>lt;sup>1</sup> Bull. Essex Inst. 13 (1881) pp. 174-178.

<sup>&</sup>lt;sup>2</sup> N. Y. State Museum Vol. V. No. 25 (1898).

<sup>&</sup>lt;sup>3</sup> N. Y. State Museum No. 254 (1924).

<sup>4</sup> Littlefield: Rhodora xxx (1928) pp. 129-131.

within a mile of the Brasher Iron Works. Although this was reported to the junior writer at the time, the latter did not have an opportunity to visit the locality until the past October, when more detailed observations were made by both writers.

The trees in question comprise a stand of about 30 individuals, of which the largest is now thirty feet high, 7.2 inches in diameter at breast height and approximately 25 years old. The majority of the trees appear to be of about the same age and evidently became established here following a burn. A number of scattered trees are to be found east of the main group to a distance of 600 feet. Other species in mixture with the jack pines are *Populus tremuloides Michx.*, *P. grandidentata Michx.*, and *Betula populifolia Marsh.* 

The soil here is the excessively acid Saugatuck fine sand, a feature not surprising in view of the well-known preferences of *Pinus Banksiana* in this respect.<sup>1</sup> Located seven miles from the St. Lawrence River at an elevation of 240 feet above sea level, this formation is typical of the deposits found in northwestern New York within the former limits of the glacial Lake Iroquois.

The isolated position of this station with respect to the previously reported occurrence of *Pinus Banksiana* in New York will be noted by the fact that it lies approximately 50 miles to the west and northwest, respectively, from the nearest stations in Clinton and Essex counties, viz., Altona and Wilmington. No occurrence of the species has been reported in Franklin County, or further westward in the state.

The station appears to be equally isolated as regards the adjacent portions of Canada since *Pinus Banksiana* is virtually absent from southern Quebec,<sup>2</sup> (the outlier at Rigaud is probably the only station within 50 miles of the international boundary in this region), and does not approach the St. Lawrence River in Ontario<sup>3, 4</sup>.

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<sup>&</sup>lt;sup>1</sup> Fernald: Rhodora xxi (1919) pp. 41-67.

<sup>&</sup>lt;sup>2</sup> Marie-Victorin: Les Gymnospermes de Québec. Contr. du Lab. de Bot. de Univ. de Montréal No. 10 (1927).

<sup>&</sup>lt;sup>8</sup> Drummond: Canad. Nat. n. s. III (1866-68) pp. 161-167.

<sup>&</sup>lt;sup>4</sup> Zavitz: Forests and Forestry in Ontario in Special Rept. to Brit. Emp. For. Conf., Ottawa (1923) p. 7.